

Reflections on semelfactivity in Polish

Abstract

This paper discusses the means employed by the Polish verb in order to communicate the meaning of single occurrence (i.e. semelfactivity). An introspective examination of the semelfactive uses of Polish perfective verbs with the suffix *-nq-*, the inchoative and resultative ("purely aspectual") prefixes *za-* and *s-/z-* as well as the prefixes expressing subjective evaluation of single acts is carried out from the perspective of the cluster model of aspect (proposed for Russian by Janda 2007). The possibility of applying to Polish Dickey and Janda's (2009) allomorphy hypothesis, which states that in Russian semelfactivity is expressed by both the suffix *-nu-* and the prefix *s-*, is considered. It is shown that even though the cluster approach to aspect offers an attractive, user-friendly method of talking about semelfactivity, numerous problems posed by the Polish semelfactive data require adjustments of the model's implicational hierarchy. The allomorphy hypothesis is less motivated in Polish than in Russian for a Polish category of *s-* prefixed semelfactives is harder to isolate.

Key words:

semelfactivity, the semelfactive suffix *-nq-*, *za-* and *s-/z-* perfectives expressing single acts, cluster model of aspect, implicational hierarchy of the model, *-nu-/s-* allomorphy in Russian

Streszczenie

Uwagi na temat semelaktywności w języku polskim

Niniejszy artykuł opisuje sposoby, w które czasownik w języku polskim oddaje znaczenie pojedynczego wystąpienia (tj. semelfaktywność). Przeprowadzono introspekcyjną analizę semelfaktywnych zastosowań polskich czasowników dokonanych z przyrostkiem *-nq-*, z przedrostkami inchoatywnymi i rezultatywnymi *za-* i *s-/z-* („czysto aspektualnymi”) oraz przedrostkami wyrażającymi subiektywną ocenę pojedynczych wystąpień w oparciu o model zgrupowań aspektowych aspektu dla j. rosyjskiego (Janda 2007). Rozważana jest możliwość zastosowania w j. polskim hipotezy alomorficznej Dickeya i Jandy (2009), według której semelfaktywność w j. rosyjskim wyrażana jest zarówno przez przyrostek *-nu-* oraz przedrostek *s-*. Wykazano, iż nawet mimo tego, że model zgrupowań aspektowych oferuje interesujący, przyjazny użytkownikowi sposób rozważań nad semelfaktywnością, rozmaite problemy wynikające z semelfaktywności w j. polskim wymagają poprawek w hierarchii implikacyjnej modelu. Hipoteza alomorficzna jest w mniejszym stopniu motywowana w j. polskim niż w j. rosyjskim, ponieważ kategoria czasowników semelfaktywnych z przedrostkiem *s-* jest trudniejsza do wyodrębnienia.

Słowa kluczowe:

semelfaktywność, przyrostki semelfaktywne *-nq-*, *za-* i przedrostki *s-/z-* wyrażające pojedyncze wystąpienia, model zgrupowań aspektowych, implikacyjna hierarchia modelu, alomorfizm *-nu-/s-* w j. rosyjskim.

Introduction

The paper reflects on the expression of semelfactivity by the Polish verb. The data under consideration are Polish perfective verbs which denote one-time actions by means of the suffix *-ną-* and/ or possibly, by prefixation. The specific aim behind the examination of these semelfactive perfectives in Polish is to find out if, in what way and to what extent the implicational hierarchy of the non-binary model of aspect proposed in Janda's (2007) seminal paper on aspectual clusters of Russian verbs, and further elaborated in Janda and Makarova's (2009) paper on Russian *-nu-* semelfactives and in Janda and Dickey's (2009) paper on the relationship between Russian semelfactives formed with *-nu-* and *s-*, can be applied to a meaningful description of semelfactive perfectives in Polish.

Analysing Polish perfectives in terms of a model of aspect proposed for Russian is not unreasonable considering the fact that Polish and Russian are generally viewed as fairly similar in their use of aspect-denoting devices.¹ Also, in the literature on Polish aspect, models of analysis proposed for Russian, have often been applied to Polish.²

Section 1 of the present article defines the class of *-ną-* suffixed Polish semelfactives using the morphological, semantic and aspectual criteria distinguished in Polish grammars and Polish linguistic literature. Section 2 explores the relationship between pure perfectivization and semelfactivity in some uses of the suffix *-ną-* and comments on the semelfactive nature of the prefixes *za-* and *s-/z-* in their inchoative and purely aspectual uses. Section 3 offers a characteristic of Polish semelfactives in terms of Janda's (2007) cluster model of aspect, defining them as Single Acts (SAP's), a fourth type of perfective in the model's implicational hierarchy. Section 4 points out problems for the application of the cluster model to Polish posed by Polish semelfactive data.

1. Semelfactives and semelfactivity in Polish linguistic literature

1.1.1. Definition and use of the adjective 'semelfactive'

The adjective *semelfactive*, from Latin *semel* 'once' and *faciō, facere* 'do', is generally associated with verbs that express the 'do-it-once' meaning, such as *kichnąć* 'sneeze once' as opposed to *kichać* 'sneeze'. It is also used to describe the suffix that in the collective linguistic consciousness of native speakers is an established morphological exponent of that meaning: *-ną-* in Polish, *-nu-* in Russian. The terms *semelfactiva*, *semelfactive verbs* and the *semelfactive suffix* are common currency in Russian–Polish contrastive studies dealing with aspect and aspectual morphology (Włodarczyk 1997,

¹ According to the East-West hypothesis advanced by Dickey (2000) the two languages represent the same, eastern type of Slavic aspect.

² See the comprehensive review of Russian and Polish literature in Stawnicka (2009: 18–35) whose own contrastive analysis of Polish and Russian *Aktionsarten* follows the traditional descriptive solutions adopted in Russian aspectology. (Stawnicka 2009: 33: "W niniejszej pracy przyjmuję rozwiązania zgodne z tradycyjnymi ujęciami rosyjskimi").

Giraud-Weber 1998, Stawnicka 2009),³ but they are hard to find in the general reference sources on Polish. For instance, an encyclopaedia of Polish (see *Encyklopedia języka polskiego* edited by Urbańczyk 1991) contains no entry for verbs denoting one-time occurrence (neither *czasowniki semelfaktywne* nor *czasowniki jednokrotne* are distinguished as a class of verbs), and semelfactive verbs as such are not discussed in popular Polish grammars, such as Bąk (2007) or Bartnicka and Satkiewicz (2000).

1.2. *Semelfactiva versus czasowniki jednokrotne*

In the literature dealing with the morphology of Polish verbs, the term *czasowniki jednokrotne* (rather than *czasowniki semelfaktywne*) is commonly used to refer to the group of *-ną-* suffixed verbs that express the meaning of one-time occurrence most clearly, such as *szeptnąć*^P ‘whisper something [a single act]’, *klasnąć*^P ‘clap once’. While the Polish term *czasowniki jednokrotne* and the Latin term *semelfactiva* are sometimes used interchangeably when referring to the class of perfective verbs formed by means of the suffix *-ną-*, such as *kichnąć*^P ‘sneeze once’ < *kichać*ⁱ ‘sneeze’ and *klęknąć*^P ‘kneel down (single occurrence)’ < *klękać*ⁱ ‘kneel down many times’ (see e.g. Grzegorzczkowska et al 1984),⁴ the two adjectives are not considered synonymous in standard morphological descriptions of the Polish verb. The semelfactive *-ną-* suffixed verbs are always characterized as *czasowniki jednokrotne* (‘single-occurrence’ verbs), but *czasowniki jednokrotne* are not viewed as necessarily containing the semelfactive suffix *-ną-* in their morphological make-up. The group of *-ną-* suffixed, *bona fide* semelfactives is usually treated as a subtype of a larger class of verbs that convey the meaning of ‘doing something once’ (as opposed to the iterative sense of ‘doing something many times’).

In popular grammars of Polish which adopt a broad view of semelfactivity, single-occurrence verbs (*czasowniki jednokrotne*) are semantically opposed to multiple-occurrence verbs (*czasowniki wielokrotne* or *iterativa*), and the objective of the numerous morphological classifications of these verbs is to define various derivational links between the two categories (see Bąk 2005, Bartnicka & Satkiewicz 2000). Since word-formation and lexical meaning are the primary focus of these classifications, the derived verb’s aspect is a matter of secondary importance. Formally, the difference between iterative and single-occurrence verbs is indicated through suffixation (i.e. by the presence or absence of a suffix).⁵ Typically, iterative verbs (*czasowniki wielokrotne*) are derived from single-occurrence verbs (*czasowniki jednokrotne*) by means of the suffixes *-a-*, *-wa-*, *-owa-* *-ywa-*. In terms of their aspectual classification, suffixed derivatives are predominantly either secondary imperfectives (*nazywać*ⁱ < *nazwać*), iterative imperfectives (*sypiać*ⁱ < *spać*) or imperfective verbs of indefinite movement (*plywać*ⁱ

³ There are very few contrastive Polish-Russian studies on aspect and on aspectual morphology, to my knowledge. Stawnicka (2009: 9) deplores the lack of cross-Slavic contrastive studies [monographs] on the category of *Aktionsarten* and emphasizes a need for research in this area.

⁴ Cf. Grzegorzczkowska et al (1984: 492): “[Czasowniki te] bywają nazywane jednokrotnymi (semelfaktywnymi).”

⁵ As Laskowski points out, however, some iterative uses are determined solely by context (see the entry *czasowniki wielokrotne* in Urbańczyk 1991: 47).

< *plynąć* ⁶. Conversely, un-suffixed verbs that form the lexical base for suffixed derivatives are: non-iterative perfective verbs which express one-time occurrence (*nazwać*^P ‘give a name’), non-iterative imperfective verbs which imply duration (*spać*ⁱ ‘sleep’, *jeść*ⁱ ‘eat’) or non-iterative imperfective verbs which indicate determinate movement (*plynąć*ⁱ ‘go to by water, swim to’). In Bąk (2007: 150–151), for example, the perfective verb *zabrać*^P ‘take away’ is classed as a *czasownik jednokrotny* because from the point of view of its derivational potential it provides a lexical base for the suffix *-a-* derivation of the iterative secondary imperfective *zabierać*ⁱ ‘take away many times’. By the same token, the imperfective *jeść*ⁱ ‘eat’ (which derives the habitual iterative imperfective *jadać*ⁱ ‘eat many times’), and the perfectives: *dac*^P ‘give’, *wyjąć*^P ‘take out’, *zawiązać*^P ‘tie up’ (which give rise to the suffixal derivatives *dawać*ⁱ, *wyjmować*ⁱ, *zawiazywać*ⁱ, respectively) are all classified as ‘verbs of single occurrence’ (*czasowniki jednokrotne*) (Bąk 2007: 150–151). In sum, in word-formation descriptions of the Polish verb in popular grammars the term *czasowniki jednokrotne* applies to: (a) aspectually perfective verbs that can form iterative imperfective derivatives by means of suffixation (*dac*^P ‘give’ > *dawać*ⁱ; *zawiązać*^P ‘tie up’ > *zawiazywać*ⁱ); (b) aspectually imperfective verbs that can form iterative imperfective derivatives by means of suffixation (*jeść*ⁱ ‘eat’ > *jadać*ⁱ; *lecieć*ⁱ ‘fly’ > *latać*ⁱ); (c) perfective verbs derived from suffixed iterative imperfectives (*zabrać*^P ‘take away’ < *zabierać*ⁱ; *minąć*^P ‘pass’ < *mijać*ⁱ) and (d) perfective semelfactive verbs derived from unsuffixed imperfective verbs by means of the suffix *-ną-* (*szczypnąć*^P ‘pinch once’ < *szczypać*ⁱ ‘pinch’). The last type of single-occurrence verbs in the above list (*czasowniki jednokrotne*) is a group of verbs that can safely be referred to as true semelfactives. They express one-time occurrences, as do all *czasowniki jednokrotne*, but in addition, their morphological and aspectual parameters are clearly specified: they have to contain the semelfactive suffix *-ną-* and they have to be perfective.⁷

⁶ According to a widely accepted consensus, with the notable exception of *-ną-* suffixed semelfactives, the presence of a suffix in a Polish verb generally implies that the verb is imperfective while the presence of a prefix is held to be a prototypical indicator of the verb’s perfectivity.

⁷ In his *Gramatyka języka polskiego* Bąk (2007: 251) includes the semelfactive *-ną-* suffixed *czasowniki jednokrotne* (He identifies them by the ending *-nąć*) in the class of verbs derived from the broad group of *czasowniki wielokrotne* (‘do-it-many-times’ verbs). Lexically, the semelfactive *-ną-* verbs he lists in the group of *czasowniki jednokrotne* are either prototypical frequentative verbs (*drapnąć*^P ‘scratch once’ from *drapać*ⁱ ‘scratch’) or verbs whose lexical bases do not imply repetition of any kind (*dźwignąć*^P ‘lift something heavy once’ < *dźwigać*ⁱ ‘carry something heavy with difficulty’, *cofnąć*^P ‘move back, back up once’ < *cofać*ⁱ ‘move back, retreat’, *zamknąć*^P ‘close something on one occasion’ < *zamykać*ⁱ ‘keep closing’ – p. 334). In the morphological classification of *czasowniki jednokrotne*, Bąk (2007: 250–251) lists includes both the perfective *-ną-* verbs that derive *czasowniki wielokrotne* (by means of the suffix *-(j)a-*, e.g. *stanąć*^P ‘stand up’ > *stawać*ⁱ, *minąć*^P ‘pass’ > *mijać*ⁱ and the perfectives in *-ną-* that are derived from the imperfective verbs in *-a-*, e.g. *dźwignąć*^P ‘lift’ < *dźwigać*ⁱ ‘carry’, *ziewnąć*^P ‘yawn once’ < *ziewać*ⁱ ‘yawn’). It is not explained why e.g. the semelfactive perfective *stanąć*^P ‘stand, get up’ is treated as a morphological **base for the derivation** of the *-a-* imperfective *stawać*ⁱ ‘stand/ get up many times’ while the *-ną-* perfective *ziewnąć*^P ‘yawn once’ is viewed as a **derivative from** the *-a-* suffixed imperfective form *ziewać*ⁱ. In an aspect-based approach to *-ną-* perfectives morphological histories of these verbs are not viewed as essential for defining them as semelfactives.

1.3. Semelfactivity and verbal prefixation

In the morphological classifications of the Polish verb, the ‘do-it-once’ verbs have been traditionally considered in relation to the process of derivational suffixation. Also, the temporal meaning of ‘doing something once’ communicated by the prototypical group of semelfactives is attributed to and strongly associated with the meaning of a suffix, the semelfactive suffix *-ną-*. Therefore, perhaps, semelfactivity of a prefix has not been seen as an option to explore in the publications on verbal prefixation by Polish authors. There is no mention of a separate semantic category of semelfactive prefixes in the studies by Śmiech (1986), Janowska and Pastuchowa (2005), Janowska (2007) or Stawnicka (2009), nor in the classic work on verbal prefixation in OCS by Słoiński (1937). This traditional, suffixation-based approach to semelfactivity contrasts sharply with recent research by cognitivist Slavicists who argue for the possibility of semelfactive prefixation. In a joint paper on semelfactives in Russian, Dickey & Janda (2009) postulate that the prefix *s-* expresses semelfactivity in Russian *s*-perfectives denoting round-trip movement (such as *shoditʹ* ‘go, round trip’) and in Russian *s*-perfectives expressing subjective evaluation (such as *sglupitʹ* ‘act as a fool’, *strusitʹ* ‘act as a coward’).

1.4. The two suffixes *-ną-*

The suffix *-ną-* in Polish *semelfactiva* (which are always **perfective**), the so-called “semelfactive *-ną-*” should be distinguished from the homonymous suffix *-ną-* in **imperfective** verbs such as *żółknąć* ‘become yellow’ or *blednąć* ‘grow pale’ or *niknąć* ‘disappear gradually’. Prototypical non-semelfactive imperfectives in *-ną-* indicate a change of state and are derived from adjectives. Their perfective counterparts are created through prefixation, as illustrated by the perfectives of the verb *schnąć*⁸ ‘to dry’, a morphological derivative from the adjective *suchy* ‘dry’, which forms several prefixed perfectives, such as: *zeschnąć* / *uschnąć* ‘dry up completely’, *wyschnąć* ‘dry out’, *poschnąć* ‘dry for a while [delimitative]’ or ‘dry up (about several objects) [distributive]’, *przeschnąć* ‘dry a bit’, etc. Other non-semelfactive imperfectives in *-ną-* are represented by a variety of verbs such as *cisnąć* ‘press’, *ginać* ‘disappear, perish’, etc.⁸

1.5. Description of Polish semelfactives in the *Gramatyka akademicka*

1.5.1. Semelfactives as paradigmatic derivatives

Polish *Gramatyka akademicka* (name borrowed from Janowska and Pastuchowa 2005: 130) edited by Grzegorzczukowa et al. (1984, vol. 2, *Morfologia, Słownictwo czasowników*), which is said to contain “the most informative and exhaustive description to date of Polish verb derivation” (Janowska and Pastuchowa 2005: 13, my translation)⁹ by H. Wróbel offers a brief discussion of Polish *-ną-* semelfactives which are distinguished as a separate group of verbs. They are viewed as a subtype of what is called “paradigmatic derivatives” (*derywatywy paradygmatyczne*), i.e. derivatives formed by regular (paradigmatic) suffix alternations in the verb’s stem. The semelfac-

⁸ For examples see Tokarski (1978: 230–232).

⁹ Cf.: “Najpełniejszym opracowaniem derywacji czasownikowej jest opis stworzony przez H. Wróbla w *Gramatyce akademickiej*” (Janowska and Pastuchowa 2005: 13).

tive *-nq-* [*-n-*] derivatives, where *-nq-* [*-n-*] substitutes the suffixes *-a/-aj-* and *-e/-o* (as in *mrugać* ‘wink’ > *mrugnąć* ‘wink once’; *piszczeć* ‘squeak’ > *pisnąć* ‘give out/produce a squeaking sound’) are discussed alongside two other types of paradigmatic derivatives distinguished by the author: (a) the group of imperfective derivatives in *-(yw)a-* (*być* ‘be’ > *bywać* ‘be frequently or from time to time’, *pić* ‘drink’ > *pijać* ‘drink regularly or from time to time’; *jeść* ‘eat’ > *jadać* ‘eat frequently or from time to time’) and (b) the group of imperfective indeterminate movement verbs in *-(w)a/-i-*, *-e-* and *-o-*, treated as paradigmatic derivatives from determinate movement verbs in *-nq-*, *-i-*, *-e-*, *-o/-i* (*płynąć* > *pływać*, *pełznąć* > *pełzać*; *toczyć* > *taczać*; *lecieć* > *latać*; *wlec* > *włóczyć*, *wieźć* > *wozić*).

1.5.2. Distinguishing characteristics of Polish semelfactives

According to Wróbel’s description in *Gramatyka akademicka* (Grzegorzczkowska et al. 1984, vol. 2, *Morfologia, Słownotwórstwo czasowników* : 492), Polish *semelfactiva* are distinguished as a class on the basis of the following morphological, semantic and aspectual characteristics:

- They constitute a morphologically defined set of de-verbal derivatives formed from verbs in *-a-* and *-e-* by the suffix *-nq-* (*drapać* ‘scratch’ > *drapnąć* ‘scratch once’, *mruczeć* ‘purr [about cats]’ > *mruknąć* ‘give a purr’).¹⁰
- They denote short-lasting (‘momentary’) acts with respect to the temporally neutral activities referred to by the lexical bases of verbs they are derived from (*piszczeć* ‘squeak’ > *pisnąć* ‘make one squeaky sound’).
- When its lexical base denotes a repeated activity (a series of repeated acts), the semelfactive verb denotes one act from the repeated cycle (shorter than the series). This lexical subtype usually describes phenomena involving movement or audio-visual effects (*mrugać* ‘wink repeatedly’ > *mrugnąć* ‘give a wink’; *pukać* ‘knock (several times)’ > *puknąć* ‘make one knock’)
- As for their aspectual status, semelfactive verbs are always perfective (*tykać* ‘swallow’ > *tyknąć*^P ‘swallow once /take one gulp’)

2. Expression of semelfactivity in Polish.

2.1. Semelfactivity of the purely perfectivizing suffix *-nq-*

Both linguists and grammarians observe that while in some verbs (verbs whose lexical base denotes a series of repeated actions, such as sneezing, pinching, etc.) the suffix *-nq-* clearly expresses the ‘do-it-once’ meaning by selecting a single cycle of the evoked activity, “in some cases, the role of *-nq-* suffixation is merely that of signalling the

¹⁰ The aspectual pair *walić* : *walnąć* ‘hit hard’ (attested as a pair in SWJP) appears to be an exception to this generalization since *walnąć* is an obvious morphological derivative of *walić*, a verb in *-i-*. (Note that *palnąć* ‘hit, shoot once’ and *palić* ‘burn, smoke’ are not a pair, but *palnąć* ‘fire out, say something stupid [metaphorically]’, *wypalić* ‘shoot out’ and *palić się* ‘be on fire’ are related.)

change of aspect” (Wróbel in Grzegorzczkowska et al (1984: 492), my translation).¹¹ An explanation Wróbel (1984: 492) offers for the ‘purely perfectivizing’ function of *-ną-* in the aspectual pairs of verbs which do not evoke naturally iterative activities, such as *klękać : klęknąć* ‘kneel’, *łykać : łyknąć* ‘swallow’, *cofać się : cofnąć się* ‘back up’; *mijać : minąć* ‘pass’, *dźwigać : dźwignąć* ‘carry, lift’ is based on the prevailing semantic impression of short duration produced by *-ną-* suffixation: since short-lasting events tend to be seen as wholes (we view them as total), and in general linguistics perfectivity is defined as a total view of an event or activity (Comrie 1976), momentary acts are seen as naturally perfective. Thus, in the overall perception of semelfactivity, the temporal and the spatial impressions tend to merge: a temporal impression of short duration is merged with the basically spatial perception of totality.

2.2. Semelfactivity of the purely perfectivizing prefixes

In the context of the purely aspectual function of the semelfactive suffix *-ną-*, it is necessary to comment on the semelfactivity of the purely aspectual prefixes in aspectual pairs such as: *śpiewać : zaśpiewać* ‘sing’, *pytać : spytać* ‘ask’, *gotować : ugotować* ‘cook’, etc. The prefixed perfectives in these pairs express completion of the activities denoted by their imperfective bases;¹² they focus on the natural end of the described activity and are prototypically transitive, having an explicit or a presupposed direct object that is characteristically viewed as an entity, as in: *zaśpiewać* [piosenkę] ‘sing something (the object is seen as an entity)’, *zatańczyć* [taniec] ‘dance a dance (the object is seen as unitary even if it may involve a few dances; the performance itself is seen as one act)’, *spytać* ‘ask a question or a number of questions, perform a single act of asking’, *ugotować* [obiad] ‘cook [dinner], get something cooked’, etc.¹³ Other typical examples of prefixed perfectives that express activities brought to completion would be furnished by the verbs: *zjeść* [obiad] ‘to finish eating [dinner], *wypić* [coś] ‘to drink up, to finish drinking [something]’, *zbudować* [dom] ‘to complete the process of building [a house]’, *napiisać* [artykuł] ‘to complete the article, to finish writing’.¹⁴ The completion meaning of these perfectives produces an impression of the event’s totality and at the same evokes an image of its singularity in time (one-time occurrence). It is possible that because the object of the activity expressed by the perfective is perceived as a unit, the activity itself is likely to be seen as unitary. In the semantics of the so-

¹¹ Cf: “[T]a sama różnica morfologiczna w niektórych wypadkach służy wyłącznie wyrażaniu różnicy aspektu” – (Grzegorzczkowska et al. 1984: 492). See the names of linguists upholding that view in Włodarczyk (1997: 102).

¹² Janda (2007) characterizes the lexical content of such verbs by calling them “Completable”.

¹³ Pawelec (2009: 117) sees the natural end of the process evoked by these transitive verbs in the spatial limit of their singular objects (the activity’s landmark). It is important, however, to also notice that because these natural-end objects are viewed as single entities, the activities they are associated with tend to be seen as single occurrences.

¹⁴ These natural perfectives of ‘completable’ verbs roughly correspond to what Vendler (1957) describes as accomplishments in his classification of verbs (into states, activities, accomplishments and achievements) based on the linguistic properties of English verbs. See Bogdan & Sullivan (2009: 37–40) for a critical discussion of Vendler’s classification in the light of their research on the tense-aspect system of Polish narrative.

called ‘purely aspectual’ prefixes two meaning components tend to be blurred: the spatial sense of natural end and the temporal sense of semelfactivity.

It might be of relevance to notice that in Isačenko’s (1968: 404) discussion of verbal prefixation in Russian, the *s*-prefixed perfectives such as *sdelat’*, *svarit’*, *spiet’* are included in the category of semelfactives. His German translations of these verbs all contain the adverb *einmal* ‘once’. Cf.,

“Wir werden nicht fehl gehen, wenn wir eine semelfaktive Bedeutung auch bei jenen mit dem Präfix *c-/co-* gebildeten Perfektiva ansetzen, die gemeinhin als echte Aspektpartner zu den entsprechenden Simplicia gelten, also auch bei *sdelat’* ‘**einmal** machen’, *svarit’* ‘**einmal** kochen’, *spiet’* ‘(**ein Lied**) singen’ usw. Freilich hat sich unter dem Druck der immer mehr um sich greifenden Aspektkorrelation die ursprüngliche semelfaktive Bedeutung dieser Verben z.T. verflüchtigt, sie ist aber noch deutlich vorhanden.” (Isačenko 1968: 404).¹⁵

The above quote from Isačenko (1968) suggests that in his opinion the semelfactive meaning is present in the meaning of prefixed perfectives that are viewed as purely aspectual because the original function of these prefixes was to express semelfactivity. Any native speaker of Polish will agree that prefixes in perfective partners of Polish aspectual pairs impart a strong sense of single occurrence and therefore, semelfactivity (or a variant thereof) should be recognized as part of their semantic make-up. The completion, end-oriented meaning of purely perfectivizing prefixes could be described as a merger of the temporal do-it-once sense (completion in time) and the spatial notion of natural end (completion in space).

2.3. Semelfactivity and momentariness

2.3.1. Momentary verbs (*Czasowniki momentalne*)

Many semelfactive verbs express actions and events that take no more than a moment and are often perceived as sudden or abrupt. Therefore, momentariness is sometimes considered as a defining, most salient semantic feature of this class of verbs, especially by the authors who refer to *semelfactiva* downright as *czasowniki momentalne* ‘momentary verbs’ (*czasowniki jednokrotne i momentalne* – Bąk 2007: 251, 334; *czasowniki momentalne* – Bartnicka & Satkiewicz 2000: 269). Bartnicka & Satkiewicz (2000: 269) define *czasowniki momentalne* as verbs suffixed in *-ną-* which denote one-time **or** sudden activities (“*czasowniki* tzw. *momentalne* sygnalizują[ce] *jednorazowość lub* *nagłość czynności*” – my emphasis). Thus again, in the semantic characteristic of semelfactive verbs, which form a distinct group on the basis of a morphological criterion (the semelfactive suffix *-ną-*), the impression of suddenness and short duration (momentariness) is blurred with the ‘do-it-once’ sense strongly entrenched in the suffix *-ną-*. In onomatopoeic verbs such as *huknąć*^P ‘to give a bang, to whack’ < *huczeć*ⁱ ‘make a continuous ringing or humming noise’, *buchnąć*^P ‘to burst (forth)’

¹⁵ Cf.: “We won’t go wrong if we attach a semelfactive meaning also to the perfective verbs formed with the prefix *s-/so-*, which generally count as genuine aspectual partners of the corresponding simple verbs, thus also to *sdelat’* ‘to do once’, *svarit’* ‘to cook once’, *spet’* ‘to sing (one song)’ etc.] Admittedly, the original semelfactive meaning of these verbs has partially disappeared under the pressure of aspect correlation, which is constantly gaining ground, but it is still clearly present” (my translation)

< *buchać*ⁱ ‘to stream forth [about vapour], to come in gusts’,¹⁶ the impression of suddenness seems so strong that the short-duration (momentariness) meaning can safely be considered more salient than the sense of ‘doing it once’.

It should be remembered that the impression of suddenness is absent from the semelfactive *-nąć* perfectives [of aspectual pairs] that do not denote acoustic phenomena, such as *klęknąć*^p ‘kneel down’ < *klękać*ⁱ ‘kneel’, *cofnąć się*^p ‘back up [on one occasion]’ < *cofać się*ⁱ ‘back up’ or *minąć*^p ‘pass somebody [in the street]’ < *mijać*ⁱ ‘keep passing (people)’ and from the *-nąć* perfectives indicating a single cycle of a repeated activity, such as *szczypnąć*^p, ‘pinch once’ or *machnąć*^p ‘wave once’. In these verbs, the ‘do-it-once’ sense is strongly present but the emphasis is on the completion of an activity (that usually is also rather short), not on the manner (abruptness, suddenness) in which it is completed.

2.3.2. *-Nąć semelfactives with a prefix*

Some *-nąć* semelfactives are additionally equipped with a prefix whose function is to strengthen the expression of semelfactivity by supplying emphasis and a nuance of immediacy. In prefixed semelfactives, such as *wykrzyknąć*^p ‘exclaim’: *krzyknąć*^p ‘cry out once’,¹⁷ *udźwignąć*^p ‘lift up’, *podźwignąć*^p ‘lift up’ [archaic – Bańkowski 2000]: *dźwignąć*^p, *zabłysnąć*^p ‘shine up once’: *błysnąć*^p ‘shine, flicker once (and disappear)’, *wzdrygnąć się*^p ‘get startled, tremble’: *drgnąć*^p ‘move [uncontrollably], tremble (once)’, the expression of the semelfactive act’s suddenness is strengthened by the prefix whose role is usually interpreted as ‘purely stylistic’.

There are prefixed *-nąć* semelfactives, however, where the prefix does not produce the expressive effect of emphasis, and since it does not alter the semantic content of the verb in any apparent way, its role has been described as ‘tautological’. Janowska & Pastuchowa (2005: 91), for example, classify the prefix *prze-* in the semelfactive *przeminać*^p ‘pass [about time]’ (versus *minąć*^p) as tautological. The prefix *u-* in *uklęknąć*^p ‘kneel down’ (versus *klęknąć*^p) or the prefix *za-* in *zabłysnąć*^p ‘shine up’ (versus *błysnąć*^p) are also redundant in some contexts.¹⁸

¹⁶ Bąk (2007: 252) observes that ultimate morphological sources of many verbs in the class of *czasowniki momentalne* are onomatopoeic nouns or interjections, Cf.: *bek – beczeć – beknąć*, *ryk – ryczeć – ryknąć*, *szept – szeptać – szepnąć*; *puk! – pukać – puknąć*; *bęć! – bęcnąć*, *cap! – capać – capnąć*.

¹⁷ Some of the prefixed semelfactives can derive secondary imperfectives (*wykrzykiwać* ‘cry out repeatedly’) while others cannot (**wzdrygiwać*). If we look at the prefixed semelfactives as perfective derivatives of prefixed imperfective verbs denoting repetition (as does Włodarczyk [1997: 103] who sees pairs like *wykrzykiwać*: *wykrzyknąć* as aspectual) we lose the ability to show that e.g. the prefixed semelfactive (*wykrzyknąć*) and the unprefixed semelfactive variant of the same verb (*krzyknąć*) are semantically related. Janda’s non-binary model of aspect links the two semelfactive forms and is able to show that they belong to one cluster of perfectives derived from the same imperfective verb *krzyzczeć* ‘shout, cry’, as evidenced by the string of perfectives in the cluster model of the simplex imperfective *krzyzczeć*: *krzyzczeć* > *zakrzyzczeć* [kogoś], *wykrzyzczeć* [się, coś] (Complex Act Perfectives) > *krzyknąć* (Single Act Perfective) > *wykrzyknąć* (Prefixed Single Act Perfective).

¹⁸ In a paper presented at SCLC 2010, George Rubinstein (2010) mentions several interesting uses of prefixed semelfactives in Russian. Prefixation of suffixed semelfactives appears to be more frequent in Russian than in Polish.

2.4. Semelfactivity of the inchoative *za-*

One of the most interesting meanings of the Polish prefix *za-* is the inchoative meaning where the presence of the prefix points to the beginning of an event denoted by the verb or indicates the beginning of a new state, as in the following *za-*-prefixed perfectives: *zapalić* 'start to smoke, light up' (*Jan zapalił papierosa* 'Jan lit up a cigarette/ started smoking'); *palić* 'be smoking'; *zakwitnąć* 'start blooming' (*Kiedy zakwitną jabłonie* 'When apple trees will start blooming'); *kwitnąć* 'be in bloom'; *złączyć* [komputer] 'turn on [the computer], link on [to the net]'; *łączyć* 'join, link'; *zaboleć* 'start hurting' (*Zabolało mnie kolano* 'My knee started hurting'); *boleć* 'hurt', etc.

It is often observed that the inchoative *za-*-perfectives of verbs denoting acoustic phenomena, such as *zabeczeć* 'za-bleat', *zaklaskać* 'za-clap', *zaćwierkać* 'za-chirp', *zagrzmieć* 'za-thunder', *zakaszeleć* 'za-cough', etc. are semantically very close to *-ną-*-semelfactives (*beknąć* 'bleat once', *klasnąć* 'clap once', *ćwierknąć* 'chirp once', *kaszlnąć* 'cough once', etc.) (Grzegorzczkowska et al. 1984: 475; Włodarczyk 1997: 93). The prefix *za-* in these perfectives usually denotes the beginning of an acoustic event that is very short thereby producing the impression of momentariness typical of semelfactive acts and events. Also, the very switch from silence to sound takes but a moment, so it is often perceived as sudden, even abrupt. Thus, the impression of semantic closeness between *za-*-prefixed inchoative perfectives and the corresponding *-ną-*-suffixed semelfactives in verbs of sound production can be explained as resulting from the momentary (sudden and very short) characteristic of inchoativity in these verbs.¹⁹ The *za-*-prefixed perfective *zaskrzypieć* and the *-ną-*-suffixed perfective *skrzypnąć* of the acoustic verb *skrzypieć* 'squeak' are practically identical in meaning in the sentences: *Drzwi zaskrzypiały* 'The door squeaked [started to squeak]' and *Drzwi skrzypnęły* 'The door squeaked [made a squeaky sound]'. A semantic similarity between the prefix *za-* and the semelfactive suffix *-ną-* can also be sensed in the perfectives of motion verbs such as *drgać* 'tremble [about hands], blink [about eyes]' which both denote a slight, perceivable movement of the eyelid in the sentences: *Powieka mu zadrgała* / *Powieka mu drgnęła* 'His eyelid moved; he seemed to have blinked'. Larger context is needed to detect a possible semantic difference between the two types of perfective in these verbs.²⁰

In some cases of acoustic *za-*-prefixed derivatives the prefix *za-* expresses not inchoativity, but pure semelfactivity. Indeed, the perfective *zapukać* 'knock' (as in *Ktoś zapukał do drzwi* 'Somebody knocked on the door') does not denote the beginning of the activity of knocking, but the fact that the act of knocking (involving a series of knocks) was performed once.²¹ If for Russian, the fact that the morphemes *s-* and

¹⁹ Łaziński hits the nail on the head by distinguishing the semelfactive (sic!) meaning as one of the meanings of the prefix *za-* (Łaziński 2009: 9).

²⁰ Obviously, the two perfectives are exchangeable only in certain specific contexts which proves again and again that the meaning of a prefix is often conditioned by pragmatic factors.

²¹ The difference between the suffixed semelfactive *puknąć* 'knock' and the prefixed semelfactive *zapukać* 'knock' is that the former refers to the performance of a single knock while the latter describes a single occurrence of the iterative activity of knocking. One could argue that we do not have the form **zapuknąć* (with the semelfactive prefix and the semelfactive suffix used simultaneously) because

-nu- are used with the same verb as alternatives (*shvastat'* or *hvastnut'* for 'boast') can be taken as evidence for the semantic identity of the two prefixes (and consequently, as an argument in favour of the *s-/nu-* allomorphy hypothesis – Dickey & Janda 2009: 14), the fact that the Polish pairs of perfective verbs: *zaskrzypieć* and *skrzypnąć* (both derived from the simplex imperfective *skrzypieć* 'squeak'), or *drgnąć* and *zadrgać* are exchangeable in some contexts can also be considered as evidence that the prefix *za-* expresses semelfactivity and thus, semantically overlaps with the suffix *-ną-* in some verbs (especially in verbs of sound-production).

3. Polish semelfactives and the cluster model

In the cluster model of aspect proposed for Russian by Janda (2007) and further elaborated in Makarova & Janda (2009), semelfactives are distinguished as a separate type of perfectives called Single Act Perfectives (SAPs).²² Proponents of the cluster model describe it as "an extension of the traditional 'aspectual-pair' model" (Makarova and Janda 2009: 3) explaining that "it acknowledges the existence of aspectual pairs and additionally recognizes that most pairs are embedded in more complex clusters of verbs that are aspectually related to each other while sharing a lexical core" (Dickey and Janda 2009: 3). The practical purpose of the cluster model is to group all perfective derivatives that are semantically and morphologically linked to the same simplex verb and to arrange them according to the relationships that hold among them. Ideally, these relationships should be captured by the model's implicational hierarchy.²³

3.1. Types of perfectives in the cluster model

Five different types of perfectives are distinguished in the extended cluster model of Russian aspect: Natural Perfectives, Specialized Perfectives, Complex Act Perfectives, Single Act Perfectives and Prefixed Single Act Perfectives (Makarova and Janda 2009). Summary characteristics of each type are given below following the description in Dickey and Janda (2009). The Russian examples are taken from Dickey and Janda (2009); the examples representing each type in Polish are mine.

there is no need to express the same sense twice in one word. On the other hand, such redundancy (a semelfactive prefix co-occurring with the semelfactive suffix) characterizes some prefixed semelfactives, e.g. *zabłysnąć* 'shine up' with the 'tautological' *za-*.

Dickey & Janda (2009: 14) consider the few Russian verbs which use two different morphemes to express semelfactivity simultaneously (*strubnut'* 'do one cowardly act' co-existing with *strusiť*) as evidence indicating that *s-* and *-nu-* belong to the same semantic continuum. Cf.: "The presence of verbs that can either form synonyms using both markers or use them simultaneously suggests that there is semantic overlap between the *-nu-* and *s-* semelfactives." (Dickey & Janda 2009: 14)

²² In Janda's (2007), Makarova and Janda (2009) and Dickey and Janda (2009), the terms *semelfactives* and *SAPs* are viewed as synonyms and are used interchangeably (see Dickey and Janda 2009: 2).

²³ The technical term used in Polish linguistic literature for groups of morphologically related derivatives is *gniazda słowotwórcze* 'derivational nests'. (For definition and examples see Urbańczyk (1991: 97)). A verb's aspectual cluster (in the cluster model) could – in very general terms – be defined as a derivational nest of perfectives related to one simplex imperfective.

3.0.1. Natural Perfectives (NP's)

- have the same lexical meaning as their Imperfective correlates and therefore correspond to the perfective members in the pair model
- usually describe the result expected given the Completable construal of their Imperfective correlates
- can denote achievements²⁴
- can derive secondary imperfectives

Examples:

Russian: *cvarit* 'cook', *napisat* 'write', *dat* 'give', *uvidet* 'see'

Polish: *ugotować* 'cook', *napisać* 'write', *dać* 'give', *ujrzeć* 'see'

3.1.2. Specialized Perfectives (SP's)

- entail a shift in the meaning of the verb
- express the results of Completable situations
- form secondary imperfectives as a rule

Examples:

Russian: *podpisat* 'sign', *perestroit* 'rebuild'

Polish: *podpisać* 'sign', *przebudować* 'rebuild'

3.1.3. Complex Act Perfectives (CAP's)

- are formed from verbs that allow Non-Completable construals
- impose an external boundary on an activity (usually beginning or duration)
- do not derive secondary imperfectives

Examples:

Russian: *poovarit* 'cook for a while', *zaskripet* 'begin squeaking', *proplakat* 'cry for a certain period of time'

Polish: *pogotować* 'cook for while', *zadzwonić* 'begin ringing', *przeplakać (noc)* 'cry for a certain period (all night)'

3.1.4. Single Act Perfectives (SAP's)

- involve [are formed from] verbs with Non-Completable construals
- involve Granularity (= often denote a single cycle in a repeatable series of actions, i.e. one "quantum" of an iterative situation)
- do not derive secondary imperfectives
- in Russian, form derivatives by means of the semelfactive suffix *-nu-* and the expressive suffix *-anu-*
- in Russian, include two types of *s*-prefixed derivatives

Examples:

Russian: *skripnut* 'squeak once', *rubanut* 'chop once', *shodit* 'go somewhere and back', *strusit* 'act like a coward once', *sglupit* 'do something stupid'

²⁴ According to Vendler's (1957) classification of verbs, achievements are represented by the English verbs such as: *recognize*, *find*, *die*.

Polish: *skrzypnąć* ‘squeak once’, *rąbnąć* ‘hit, chop once’ [colloquial], *liznąć* ‘lick once’ [colloquial for *polizać*]; *fundnąć* ‘pay for somebody once’ [colloquial for *zafundować*]; *schodzić* (*miasto*) *za czymś* ‘cover some territory [the town] walking to bring something back’, *stchórzyć* ‘act like a coward once’, *wyglupić się* ‘act like a fool once, make a fool of oneself’, *zaszaleć* ‘do something crazy’

3.1.4.1. Polish SAP's with the expressive -nq-

The Polish examples listed in (3.1) should be treated as suggestions of the closest possible equivalents of the perfective types distinguished by Dickey and Janda (2009) in Russian. It has to be made clear however that in the case of SAP's (3.1.4) the types of semelfactives in the two languages are not exactly parallel. First, there is no suffix in Polish that would correspond to the Russian expressive suffix *-anu-*. It has been suggested that in some verbs, the semelfactive suffix *-nq-* carries an expressive load similar to that conveyed by the Russian suffix *-anu-*. Włodarczyk (1997), for instance, interprets the meaning of *-nq-* in the colloquial semelfactives *fundnąć*^P, *liznąć*^P as equivalent to the meaning communicated by the Russian *-anu-*. Even though the expressive variant of *-nq-* appears to be very rare in Polish (by comparison with Russian), the suffix certainly accounts for the impression of colloquialism in these two verbs. The non-colloquial equivalents of the expressive semelfactives *fundnąć*^P, *liznąć*^P in standard Polish are the prefixed perfectives *zafundować* and *polizać*, whose prefixes *za-* and *po-* express the meaning of single occurrence.

3.1.4.2. Polish SAP's with the prefix s-

As evidenced by the Russian prefixed-verb examples in (3.1.4), the Russian prefix *s-* is viewed as semelfactive in two lexical classes of verbs: verbs denoting indeterminate movement (represented by the perfective verb *shodit'* ‘go somewhere and come back’) and verbs expressing a subjective assessment of single acts (*sglupit'* ‘act as a fool’). It is not possible to endow the Polish prefix *s-* with such exclusive rights to semelfactivity for *s-*prefixed perfectives in modern Polish do not form well-distinguished classes of semelfactives that would correspond to the two types of *s-*prefixed SAP's postulated by Dickey and Janda (2009) for Russian.

In Polish, *s-*prefixed indeterminate motion perfectives do not denote single, round-trip events (as does the Russian perfective *shodit'* ‘go somewhere and back’). However, one specific usage of the verb *schodzić*^P (the prototypical *s-*prefixed perfective of indeterminate motion) can be interpreted as resembling the ‘round trip’ semelfactive meaning in Russian. This usage is found in contexts where *schodzić*^P (and the related *zjeździć*^P ‘cover space by car, bicycle, motorcycle, etc.’) expresses the idea of ‘covering some territory/ going somewhere in order to find something (and bring it back)’, as in *Schodzę całe miasto, jeśli będzie trzeba, aż znajdę odpowiednią sukienkę* ‘I will cover the whole city on foot, if necessary, until I find a suitable dress’, or in *Pół Polski zjeździłem za tym komputerem* ‘I have covered half of Poland's territory to get this computer [to find this computer and bring it home]’.

A very similar sense of ‘covering space to find and fetch something’ is attested in the 17th–18th century uses of the Russian semelfactive of motion *slaziti* quoted by

Dickey and Janda (2009: 17) in the historical background discussion of the round-trip perfective *shodit'* in modern Russian.²⁵ One is tempted to speculate that the 'round-trip' use of the prefix *s-* in Russian semelfactive perfectives of indeterminate motion, which apparently developed from the 'covering space to find and fetch something' sense attested in the 17th–18th century uses, represents an advanced stage in the semantic development of the prefix *s-* in Slavic and that the 'covering space to find and fetch something' sense of *s-* in modern Polish corresponds to the historical use in the 17th–18th century Russian. A single use, however, does not provide sufficient evidence to advance a claim that the Polish prefix *s-* expresses (or has the potential to express) semelfactivity in verbs of indeterminate motion.²⁶

Russian *s*-prefixed perfectives that express subjective assessment of semelfactive acts, such as *strusit'* 'act like a coward once', *sglupit'* 'act like a fool once' are rendered by prefixed perfectives also in Polish. However, while many Polish verbs expressing subjective assessment of single acts do take the prefix *s-* (*stchórzyc'* 'act cowardly', *zbaranieć* 'act dumbfounded, like a sheep', *zbieść się* 'stop functioning, refuse to cooperate', *zblaźnić się* 'act like a fool', *ześwinić się* 'act dishonorably, like a pig' *zeszmacić się* 'act with no dignity, like a piece of rag), some prefixed perfectives express subjective assessment of semelfactive acts employing prefixes other than *s-*. The verbs *wycwanić się* 'act clever, do one clever thing' (as in *W końcu się wycwanił w rozliczeniach podatkowych* [SWJP] 'He finally acted clever in his tax report'), *poblaźnić* [się] 'act as a jester' (Bańkowski 2000) and *zaszaleć* 'do something crazy' (as in *Zaszalał i wbrew zdrowemu rozsądkowi kupił ten samochód* 'He acted crazy when he bought that car against all good reason') express an evaluation (positive or negative) of the evoked semelfactive events. The perfectizing prefixes employed to communicate that subjective assessment are *wy-*, *po-* and *za-*, not the prefix *s-*.²⁷

3.2. Implicational hierarchy of the cluster model

The cluster model is linear and presupposes an implicational hierarchy which defines the possible combinations of perfectives derived from [related to] one simplex imperfective. According to Makarova and Janda (2009: 4), the possible combinations of perfectives in a cluster (of the unmodified, basic model for Russian) are defined by the following hierarchy of derivatives:

(Natural/ Specialized) > Complex Act > Single Act

²⁵ Janowska & Pastuchowa (2005: 197) attest the verb *schodzić*^P [cały świat] in the sense of covering space (with no specification of the reason) in Old Polish. That use – in the past as well as today – is classified as 'perlative'.

²⁶ It is significant to note that *s*-prefixed Polish verbs denoting movement in water (*splynać* / *splynąć*) and in the air (*złatać/zlecieć*) would be very hard to use in the 'cover space to find and fetch something' sense. While a metaphorical use *Zlatam (?zlece) całe miasto żeby kupić ten model* is conceivable, **Spływam/splynę wszystkie morza i oceany, żeby znaleźć złote runo* is impossible.

²⁷ The verb *zaszaleć* 'do something crazy' is certainly a SAP, but it is not necessarily perceived as negative. Before labelling a verb as 'negative', a whole range of issues relating to the cultural context (of the language and of a particular use) has to be considered.

SAP's occupy the final position in the hierarchy of perfective derivatives, being placed after the optional category of Natural and Specialized Perfectives and after the obligatory category of Complex Act Perfectives. That ordering suggests that in Russian: (a) clusters containing SAP's (i.e. semelfactives) do not have to contain NP's or SP's, but (b) "if there is a SAP in a cluster, it [the cluster] must also contain a CAP" (Makarova and Janda 2009: 4).

4. Problems with the cluster model

4.1. Problem data in Russian (Makarova & Janda 2009)

Makarova and Janda (2009) identify two major problems for the strict interpretation of the model's implicational hierarchy raised by the Russian data. These problems involve:

- (a) "clusters where SAP's are found in absence of CAP's", e.g.: *smorkat'sja* 'blow one's nose' > *vysmorkat'sja*^P [NP] > *smorknut'sja*^P [SAP] 'blow one's nose once',
- (b) "clusters that contain perfectives not accounted for in the implicational hierarchy", specifically, perfectives formed from SAP's by prefixation, such as *vyprygnut*^P 'jump out once' [prefixed SAP] < *prygnut*^P [SAP] 'jump once'.²⁸

Makarova and Janda (2009: 5) appear to dismiss the problem for the model caused by incomplete clusters by attaching the label of "deviations from the implicational hierarchy" to the non-conforming data. Their solution to the problem posed by prefixed semelfactives is to propose an additional type of perfective that takes care of prefixed SAP's such as *vyprygnut* 'jump out once' and *vsikriknut* 'cry out once' (Makarova and Janda 2009: 13–17). In the modified version of the cluster model, perfectives of the fifth type are ordered after Single Acts (SAP's) in the hierarchy of perfective types, which suggests that the presence of a prefixed semelfactive in a cluster is conditioned by the presence of an unprefixed SAP the prefixed semelfactive has been derived from. Makarova and Janda (2009) qualify all prefixed semelfactives in Russian as 'Specialized SAP's' (SSAP's).

4.2. Problem data in Polish

An introspective examination of Polish semelfactive data has revealed three types of problems for the model's implicational hierarchy:

- (a) problems posed by incomplete (truncated) clusters (for instance, by clusters which do have SAP's but contain no CAP's)
- (b) problems posed by clusters with prefixed *-nq-* semelfactives which have no unprefixed SAP's the prefixed SAP's could have been derived from
- (c) problems related to the classification of prefixed *-nq-* semelfactives as SSAP's

The semelfactive verbs under consideration put into question the implicational hierarchy of the clusters that contain them in various ways. The problems identified as (a) and (b) involve five types of incomplete ('truncated') clusters of perfectives

²⁸ The sign "<" means: 'implied by and derived from'.

unaccountable for by the implicational hierarchy of the extended cluster model;²⁹ the problem raised by prefixed *-nq-* semelfactives [stated in (c)] concerns the definition of the fifth type of perfective in the Polish version of the modified model. The truncated clusters to be discussed all contain semelfactive perfectives (SAP's and/or prefixed SSAP's) but lack some or all of the other types (NP's /SP's, CAP's, simplex imperfectives) specified in the model. I have identified the following five types of semelfactives at the source of the hierarchy problems in truncated clusters: *Semelfactiva tantum*, *Aspectual semelfactives*, *Semelfactives with no CAP's and no NP/SP's*; *Semelfactives with no CAP's*; *Prefixed semelfactives with no SAP's*.³⁰

4.2.1. *Semelfactiva tantum*

Semelfactiva tantum belong to the category of *perfectiva tantum*, verbs that have only one aspectual form, the perfective. They represent the morphological type of *-nq-* suffixed semelfactives that exist all by themselves, with no related imperfectives and no perfective derivatives. As they are not linked to any other verb morphologically, they do not form a cluster to speak of and could in fact be called 'non-cluster semelfactives'. In terms of the cluster model typology, *semelfactiva tantum* are Single Acts (SAP's) with no NP's/SP's, no CAP, no SSAP's and no simple imperfectives. This group of semelfactives is represented by the verbs: *ocknąć się* [ze snu, z omdlenia] 'wake up, regain consciousness'; *runąć* 'fall down suddenly'; *wypsnąć się* 'say something unintended, spill the beans [colloquial]'. Lexically, the verbs quoted as examples of the type under consideration express a change of state beyond the subject's control. The semelfactive suffix *-nq-* indicates that the change is seen as a one-time act.

4.2.2. *Aspectual semelfactives*

Aspectual semelfactives are semelfactive perfectives found in traditional aspectual pairs. They have simplex imperfective partners, but no perfective derivatives they could form a cluster with. In terms of the cluster model terminology, they are SAP's that exist as the only perfectives of their imperfective counterparts, i.e. they have no CAP's, no NP/SP's and no SSAP's in their clusters. Thus, aspectual semelfactives form what could be called 'one-member clusters'. The verb *zerknąć*^P (SAP) 'have a look, glance once' < *zerknąć*ⁱ 'look repeatedly, glance many times' would be a typical representative

²⁹ Makarova and Janda (2009: 5) identify four types of 'truncated' clusters in Russian that are problematic for the cluster model's implicational hierarchy.

³⁰ To appreciate the problems for the model caused by truncated clusters, see the prototypical full cluster of perfectives (containing the semelfactive SAP *dmuchnąć*^P) related to the imperfective verb *dmuchać*ⁱ 'blow':

dmuchnąć^P < *dmuchać*ⁱ 'blow':
 SP: *nadmuchnąć*^P [balonik] 'blow up [a balloon] > *nadmuchiwać*ⁱ
wydmuchnąć^P [pisanek] 'blow out [an egg] > *wydmuchiwać*ⁱ
przedomuchnąć^P [rurkę] 'blow through [a pipe] > *przedomuchiwać*ⁱ
rozdmuchnąć^P [afere] 'spread out [the sensational news] > *rozdmuchiwać*ⁱ
 CAP: *podmuchnąć*^P 'blow for a while, a bit'
 SAP: *dmuchnąć*^P 'blow once'
 SSAP: *zdmuchnąć*^P 'remove by blowing' > *zdmuchiwać*ⁱ > *poddmuchiwać*^P

of this group of semelfactives in Polish. Some prefixed perfectives expressing a subjective evaluation of semelfactive acts can also be classified as belonging to the class of aspectual semelfactives, e.g. *zeszmacić się* (SAP) ‘show no dignity, act as if one were a *szmata*, a piece of rag’ < *szmacić się*³¹ ‘behave as a piece of rag on many occasions’ (as in *Czy zawsze musisz się tak szmacić?* ‘Do you always have to act as a *szmata*?’); *ześwinić się* (SAP) ‘act like a pig, commit a dishonorable act’ < *świnić się*³²; *stchórzyć* (SAP) ‘act like a coward by avoiding/ not facing a challenge’ < *tchórzyć*³³ a denominal derivative from the name of the animal *tchórz* ‘polecat, fougart, fitchew’.³¹

4.2.3. Semelfactives (SAP’s and SSAP’s) with no CAP’s and no NP/SP’s

These verbs’ clusters contain semelfactive perfectives only, i.e. they consist of a simplex imperfective and representatives of the two types of SAP’s : a *-ną-* suffixed SAP and one or more prefixed SSAP’s (prefixed *-ną-* semelfactives) with no CAP and no NP/SP derivatives.³² In each cluster the semelfactive perfectives form a SAP > SSAP sequence of derivatives, as illustrated by the following examples:

- *blyskać*³⁴ ‘flicker, shine’ > *blysnąć* (SAP) > *zabłysnąć* (SSAP);
- *mijać*³⁵ ‘pass’ > *minąć* (SAP) > *przeminać* [about time], *ominać*, *wyminąć*, *pominać* (SSAP’s);
- *łykać*³⁶ ‘gulp, swallow’ > *łyknąć* (SAP) ‘take one gulp’ > *przełknąć*, *połknąć* (SSAP’s) ‘swallow’, etc.

The clusters proposed for the verbs under discussion illustrate a number of issues that need to be addressed in a descriptive account of Polish semelfactives.

The first issue concerns the relationship of prefixed semelfactives to the corresponding prefixed imperfectives. Adopting a cluster model description of aspect in Polish would require that the prefixed perfectives *ominać*, *wyminąć*, *przeminać* [about time], *pominać* (related to the imperfective *mijać* ‘pass’ and to the semelfactive perfective *minąć* (SAP) ‘pass by’) be given a non-traditional unconventional interpretation

³¹ There are prefixed semelfactives of subjective assessment that have other prefixed derivatives in their clusters, e.g. *zbaranieć* ‘act as a sheep, act dumbfounded’ (SAP) (as in *Zbaraniał na mój widok*. ‘He was completely dumbfounded when he saw me [he was so surprised and shocked]’) and *pobaranieć* ‘change appearance’ [regional] (SP) (as in *Zimno ci? Nos ci pobaraniał*. ‘Are you cold? Your nose has turned red.’) See also the *s*-prefixed perfective *zglupieć* ‘become stupid or act stupid’ (and the semantically close perfectives *zwarować*, *zszikować*, *sfiksować*, etc.) which depending on the context, could qualify as Complex Acts with the inchoative prefix *z-* (as in *Kompletnie zglupiał po tym pobycie w Stanach – wszystko przelicza na dolary* ‘That stay in the US made him really stupid – he calculates [the price of] everything in dollars’) or as Single Acts (*Zglupiał i kupił samochód na który go nie stać* ‘He acted stupid/ did a stupid thing and bought the car he cannot really afford.’) By comparison, according to Dickey (2005: 17) in Czech, the corresponding *z*-prefixed perfective *zšafmrneť* go crazy’ considered out of context is qualified as inchoative (i.e. as denoting a Complex Act).

³² It should be noted that there are no time-expressing prefixed verbs **pobłyskać* ‘flicker for a while’, **zabłyskać* ‘start flickering’ in the cluster with *blysnąć* (SAP), *zabłysnąć* (SSAP) related to [derived from] the imperfective *blyskać* but in the cluster with the perfective *blysnąć* (SAP) derived from *blyszcząć* ‘shine’, a CAP is possible: the verb *poblyszcząć* ‘shine for a while’ could be used in contexts such as *Poblyszczał na rynku piosenkarskim przez rok czy dwa, a potem jego gwiazda nagle zgasała*. ‘He shone on the song market for a year or two, but then his popularity as a star suddenly died out.’

of their derivational histories. In the extended cluster model, these prefixed perfectives would be treated as Specialized Single Acts derived from the Single Act perfective *minąć*, which in turn is viewed as a perfective derivative of the simplex unprefixated imperfective *mijać*. In the traditional, morphological descriptions of the Polish verb (see e.g. Bąk 2007), which conform to the binary approach to aspect, these prefixed perfectives are seen as derivatives of prefixed imperfectives they form aspectual pairs with, e.g. *ominać* < *omijać*; *przeминаć* < *przemijać*, etc. The descriptive solution imposed by the cluster model's hierarchy requires that the *-ja-* imperfectives (*mijać*) are treated as the simplex imperfective bases of the semelfactive perfectives in the cluster (*mijać* > *minąć*, *przeминаć*) and that in consequence, the prefixed *-ja-* imperfectives are viewed as secondary imperfectives created from their corresponding SSAP's (*omijać*, *przemijać* < *ominać*, *przeминаć*). The unquestionable advantage of the cluster-model solution is the fact that all derivative forms related to the verb *mijać* are united within one descriptive format. The challenge for the traditional approach is to accept the classification of prefixed *-ja-* imperfectives as secondary derivatives of prefixed semelfactives (in the cluster model of aspect) instead of viewing them as imperfective base forms of prefixed semelfactives (in the aspectual-pair model).³³

A problem issue involving the prefixed semelfactive *przeминаć* 'pass [about time]' concerns the classification of this verb as a Specialized SAP in the extended model. In fact, *przeминаć* could be interpreted as a Complex Act (rather than a SSAP) with a temporal, duration reading of its prefix *prze-*. (In contexts like *Młodość przeminie* [WSJP] 'Youth will pass', the verb evokes the passage of time, not a specific manner in which the verb event happens).

A minor point to be taken care of in a cluster model description of Polish verbs is raised by the semelfactive *błysnąć* 'shine up once, light up for a moment'. This SAP is associated with two simplex imperfectives: *blyskać* 'flicker' and *blyszczyć* 'shine' (WSJP lists it as a member of two aspectual pairs). Therefore, it will be a member of two different clusters in a cluster-model description:³⁴

- *blyskać* 'flicker' > *blysnąć* 'flicker once' (SAP) > *zabłysnąć* 'light up' (SSAP)
- *blyszczyć* 'shine' > *pobłyszczyć* 'shine for some time' (CAP) > *blysnąć* 'light up' (SSAP)

In sum, recourse to pragmatics is absolutely necessary to determine the cluster-model classification of perfective derivatives related to two simplex imperfectives.

³³ A similar problem is illustrated by the prefixed semelfactives *połknąć*, *przełknąć* which in the cluster-model description would be related to the imperfective *łykać* and defined as SSAP's derived from the SAP *łyknąć*, but could be viewed as aspectual perfectives each derived from a different prefixed imperfective in separate aspectual pairs: *połykać* : *połknąć*, *przełykać* : *przełknąć*.

³⁴ Just as in the case of ambiguous semelfactives like *błysnąć*, care needs to be taken of ambiguous imperfective simplexes like *chrupać* 'crack' which give rise to two different clusters depending on the interpretation of the verb's meaning: a truncated cluster with a semelfactive perfective: *chrupać* 'crack [produce the sound of cracking]' > *chrupnąć* (SAP), as in: *Orzech chrupnął mu w zębach* 'The nut cracked when he bit on it' and a full cluster with a prefixed NP (*schrupać*) and a CAP (*pochrupać* [sobie]): *chrupać* 'eat something hard and produce a cracking sound' > *schrupać* (NP), as in *Wiewiórka schrupała orzech* 'The squirrel ate ["cracked up"] the nut.' > *pochrupać* (CAP), as in *Pochrupię sobie orzeszków* 'I'll indulge in [give myself] the pleasure of eating some nuts.'

4.2.4. Semelfactives (SAP's and SSAP's) with SP's but no CAP's

The Polish perfective *klęknąć* 'kneel down' derived from the imperfective *klękać* (Grzegorzczkowska et al 1984) is a crown example of semelfactives in truncated clusters without a CAP but containing a *po*-prefixed SP:

klękać 'kneel' > *pokłękać* (SP) > *klęknąć* (SAP) > ***przyklęknąć/ukłęknąć*** (SSAP' s)

In the cluster-based description of *klękać*, the distributive *po*-derivative *pokłękać* (as in *Pokłękali gdzie mogli* 'They knelt wherever they could') would be classified as a SP, but since it does not allow secondary imperfectivization (**pokłękniwać*), its status as a Specialized Perfective is not prototypical. The problem for the cluster-model description of the perfectives of *klękać* is caused by the ambiguous value of the prefix *przy-* in the prefixed semelfactive ***przyklęknąć***. In some contexts the prefix indicates the manner in which the act of kneeling is accomplished and would be classified as a SP, as in: *Chciał/Próbował (u)klęknąć, ale nie mógł, bo bolało go kolano, więc tylko przyklęknął* 'He tried to kneel, but could not because his knee was hurting, so he *przy*-knelt only'. In other contexts the prefixed semelfactive ***przyklęknąć*** clearly refers to time, as in *Przyklęknął na chwilę i zaraz wstał* 'He *przy*-knelt for a while and got up immediately', so the verb would be interpreted as a Complex Act.³⁵ It is obvious that pragmatic factors have to be considered in assigning a type qualification to prefixed semelfactives in the cluster model.

4.2.5. Prefixed semelfactives with no SAP's

The last type of semelfactives requiring special attention are prefixed semelfactives (SSAP's) that have no related unprefixed semelfactives (SAP's) in their clusters. They are represented by the prefixed perfectives *złęknąć się*^P 'get scared' < *lękać się*ⁱ 'be scared'; *zawładnąć*^P 'come to rule' < *władać*ⁱ 'control'; *zagadnąć*^P 'start a conversation' < *gadać*ⁱ 'talk [colloquial]' which have no unprefixed semelfactive forms in contemporary Polish (**lęknąć się*, **władnąć*, **gadnąć*) that could serve as SAP's in their clusters. Since in the extended version of the cluster model (Makarova & Janda 2009), SAP's are obligatory in clusters containing SSAP's, these lexical gaps pose a problem for the strict interpretation of the model's implicational hierarchy. A possible solution would be to include the historical verb forms as SAP's in cluster descriptions of prefixed semelfactives like *złęknąć się*^P, *zawładnąć*^P, *zagadnąć*^P or to allow for the possibility of hypothetical SAP's in the model. Also, the model's implicational hierarchy would have to be interpreted as a tendency rather than a rule.

4.3. Problems with the classification of prefixed semelfactives

Janda & Makarova (2009) have proposed a modified, extended version of the cluster model which includes a fifth type of perfective – a Specialized Single Act (SSAP) – to account for prefixed *-nu-* semelfactives in Russian. Since prefixed semelfactives are regularly included in the lists of *-ną-* perfectives found in Polish grammars, the addi-

³⁵ The meaning of *przy-* in this example could be qualified as delimitative. It is found in the verbs *przysnąć* 'fall asleep for a while'; *przykucnąć*, 'crouch for a little', *przycupnąć* 'rest for a while', etc.

tion of the category of SSAP's to the cluster model of aspect is a welcome modification considering the Polish data. In terms of their general characteristic, Polish SSAP's are similar to their Russian correlates: they express single actions, as do SAP's, and as typical SAP's can have non-completable construals (SAP *błysnąć* : SSAP *zabłysnąć*). At the same time, they can – for the most part – form secondary imperfectives, as do SP's (SP *przepisać* > *przepisywać*³⁶, SSAP *wykrzyknąć* > *wykrzykiwać*³⁶), but unlike typical SP's (and NP's), “they do not express the results of completable situations” (Dickey & Janda 2009: 4).

However, many prefixed semelfactives in Polish are difficult to be classified as SSAP's because the prefix they have adopted does not introduce lexical content similar to the content of the prefixes in the category of SP's. For example, the prefix *przy-* can express inchoativity, a temporal sense characterizing Complex Acts, in the semelfactive *przykleknąć* (see the discussion in 4.2.4). The prefix *za-* in *zawładnąć* (as in *Zawładnął całym krajem* [WSJP] ‘He came to rule the whole country’) is also inchoative and so is *za-* in *zagadnąć*³⁷ ‘begin to talk to somebody’ [cf. the obsolete *zadać gadkę* ‘ask a question’ mentioned by Janowska & Pastuchowa] (cf.: *Jakiś przechodzień zagadnął go pytając o pocztę* [WSJP] ‘A passer-by accosted him and asked where the post-office was.'). Therefore, on semantic grounds these *za-*semelfactives would not be SSAP's but CASAP's (Complex Act Single Act Perfectives), a type of perfective not provided for in the model.

In *złęknąć się*^P (as in *Złękała się odpowiedzialności* [WSJP] ‘She got scared when she realized what she might be responsible for’) the prefix *z-* could be interpreted as expressing natural completion [natural end] of a very short activity (the moment of experiencing fear),³⁷ so at best, this perfective would qualify as a NSAP (a Natural Single Act Perfective), an option non-existent in the extended model either.

Since many prefixed semelfactives in Polish do not fall neatly into the category of Specialized Single Acts proposed in the extended cluster model, the model would need further improvement before it is adopted for Polish.

5. Conclusions

Semelfactivity is the ability of a verb to express single, one-time occurrence. This ability depends on the verb's lexical meaning, context of use and the verb's morphological structure.

³⁶ Śmiech (1986: 32) suggests that secondary imperfectives are formed from those prefixed verbs only whose prefixes have clear semantic value.

³⁷ Śmiech (1986: 34–35) however, does not include *złęknąć się* in either of his two lists of verbs with the purely perfectiving *z-*. Janowska & Pastuchowa (2005: 212) attest the verb's occurrence in Old Polish, but do not include any comments on the meaning of the prefix in this formation. The synonym *przestraszyć się* ‘get scared’ they quote as an explanation of the verb's meaning is strongly inchoative and could be interpreted as pointing to the inchoative sense of *z-* in *złęknąć się* (as in *zrozumieć* ‘come to understand’, *spodobać się* ‘begin to be liked’, *zmartwić się* ‘get worried, start worrying’ – *ibid.*, p.197). On the other hand, *przestraszyć* is a modern variant of Old Polish *zestraszyć*, classified as purely aspectual (p.199). That would suggest that in Old Polish at least, the *z-* of *złęknąć się* was not inchoative, but purely aspectual.

Prototypical semelfactives are perfective verbs with the suffix *-ną-* denoting one cycle of a repeated activity (*szczypnąć* ‘pinch once’). Semelfactive meaning is also expressed by perfectives with a prefix which indicate short-lasting acoustic (and visual) phenomena (*zagrzmieć* ‘thunder’), natural perfectives which denote completion (*zrobić* ‘do [something]’; *zatańczyć* ‘dance something’) and perfectives expressing an evaluative assessment of single acts (*wyglupić się* ‘act as a fool’, *zbaranieć* ‘become dumbfolded’).

The morphological exponent of semelfactivity in Polish is the semelfactive suffix *-ną-*. In some verbs the semelfactive meaning is also communicated by inchoative or purely aspectual prefixes.

The following observations concerning the possible application of the cluster model of aspect to Polish can be made on the basis of this introspective examination of Polish semelfactive data and the literature on verbal derivation in Polish:

a. The cluster approach to aspect offers an attractive, user-friendly method of talking about intricacies of Polish aspectual morphology in simple terms.

b. Considering the lexical gaps and the semantic nuances of Polish semelfactive data, the implicational hierarchy of the cluster model should be treated as a tendency rather than a rule.

c. Postulating the category of *s-* prefixed semelfactives in Polish is much less motivated than in Russian because the prefix *s-* is not the only prefix that can express semelfactivity.

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